



Australian Bureau of Statistics

1350.0 - Australian Economic Indicators, 1993

ARCHIVED ISSUE Released at 11:30 AM (CANBERRA TIME) 22/09/1993

1993 Feature Article - Major ABS Classifications

This article was published in Australian Economic Indicators August 1993 issue on 2 August 1993.

INTRODUCTION

Each year the ABS produces nearly two thousand separate statistical bulletins with the data contained therein classified according to a variety of national and international standards.

Classification is one of the cornerstones of statistics. Without the accurate and systematic arrangement of data according to common properties, statistical output can be neither reliable nor comparable.

Over the years, the ABS has expanded greatly the scope and sophistication of its classification systems and methods. Comprehensive classifications now exist in many fields. Regular reviews are conducted to ensure that economic and social changes are reflected in the classifications and, where relevant and possible, Australian statistical classifications are either integrated or closely aligned with international standards.

The ABS wishes to see the highest possible level of coordination of statistical effort across Australia. This article aims to encourage the wider use of common classification systems by all producers of Australian statistics. Unfortunately, through lack of use of common classifications and standards, many public and private sector organisations generate statistics that can not be used in conjunction with the statistical output of the ABS and other bodies.

The lack of coordination is sometimes justified by claims that there are specialist requirements. However, it often arises through lack of knowledge about common statistical standards and the benefits to be gained through their use. Greater use of a common statistical framework throughout Australia not only increases efficiency, but also enriches the data that can be drawn upon by the community in decision-making.

This article provides an introduction to the major classifications developed and utilised by the ABS. These classifications are grouped into four broad areas: area classifications; economic classifications; social classifications; and other classifications. The structure and purpose of each classification is outlined, with a description of the statistical units to which the classification is applied. Statistical units are the units of observation in a statistical series, that is, the basic entities about which data are recorded and classified, and then aggregated to provide the official statistics. Examples of statistical units include businesses, farms, motor vehicles, building sites, persons, households and families.

Apart from the major classifications described in the following pages, many other classifications are used by the ABS. Some have been developed jointly with other agencies and others have been developed by international organisations (e.g. the International Classification of Diseases produced by the World Health Organisation and the Standard International Trade Classification

produced by the United Nations). A listing of some of these classifications is contained in a table at the end of the article.

AREA CLASSIFICATIONS

ASGC

Australian Standard Geographical Classification

The Australian Standard Geographic Classification is the principal Australia-wide geographical classification of the ABS. It is widely used in the collection, compilation and provision of statistics by area. The hierarchical main structure of the ASGC is comprised of, at the most detailed level, Collectors Districts, which are only used in a population census, Statistical Local Areas (SLAs) (commonly, one or two SLAs make up a local government area), Statistical Subdivisions and Statistical Divisions (SDs), which may be thought of as the regional components of the ASGC and finally, at the broadest level, the States and Territories. The numbering system of the ASGC is also hierarchical and indicates the level in the Main Structure (i.e. State, SD and so on). At the 1991 Population Census, the ASGC comprised 1354 SLAs, 197 SSDs, 65 SDs and 8 States/ Territories.

Statistics collected from households in population censuses and surveys and from establishments (e.g. individual farms, mines, shops and factories) can be classified using the ASGC system and subsequently compiled and published for the appropriate geographical areas.

For further information: Australian Standard Geographical Classification (ASGC) (cat. no. 1216.0).

ASCCSS

Australian Standard Classification of Countries for Social Statistics

The Australian Standard Classification of Countries for Social Statistics (ASCCSS) is a classification of countries based on the concept of geographic proximity. It groups countries into progressively broader geographic areas on the basis of similarity in terms of their social, cultural, economic and political characteristics. The ABS uses ASCCSS in its own statistical work and urges its use by other government agencies and private organisations classifying demographic, labour and social statistics by country. For example, the classification should be used when collecting, aggregating and disseminating data relating to personal characteristics such as country of birth, country of last residence, country of citizenship, etc. The classification is not intended for use in classifying economic statistics by country, nor is it intended for classifying related concepts such as the ethnicity of individuals or the language spoken by individuals.

The base units in the classification are 'country units'. The four types of 'country unit' identified in the classification are:

- independent countries (excluding their dependencies, external territories, etc.);
- overseas dependencies, external territories, bailiwicks, etc., of independent countries;
- units which are recognised geographic areas, the ownership or control of which is in dispute; and
- states and territories of Australia and component countries of the United Kingdom.

All independent countries are identified in the classification. Other 'country' units are identified if they are considered to be significant in terms of the major purposes for which the classification

has been developed.

For further information: Australian Standard Classification of Countries for Social Statistics (ASCCSS) (cat. no. 1269.0).

ECONOMIC CLASSIFICATIONS

Industry Classifications

ANZSIC

Australian and New Zealand Standard Industrial Classification

The ANZSIC has been produced by the ABS and the New Zealand Department of Statistics for use in the collection and publication of statistics in the two countries. It replaces the Australian Standard Industrial Classification (ASIC) and the New Zealand Standard Industrial Classification (NZSIC).

The ANZSIC is the standard to be applied in both countries for the production and analysis of official industry statistics. Users in both countries have been widely consulted in the development of the ANZSIC to ensure that it adequately reflects the structure of Australian and New Zealand industry, and services user requirements for industry statistics. It was released in 1993 and will be implemented progressively in most relevant annual and sub-annual ABS collections in 1993-94.

The general notion of an industry is that of a group of businesses which do similar things. Industries represented in the ANZSIC are somewhat more qualified in order to address a range of statistical and cost considerations. The ANZSIC industry classes are designed to:

- represent recognisable segments of Australian and New Zealand industry;
- meet user requirements for statistics;
- be homogeneous in terms of industrial activities;
- be economically significant; and
- align as closely as practicable with the International Standard Industrial Classification of All Economic Activities (ISIC).

The ANZSIC employs a 4-level hierarchical structure consisting of divisions (at the broadest level), subdivisions, groups and classes (at the finest level). The following industry divisions are represented at the broadest level of the classification:

Agriculture, Forestry and Fishing
Mining
Manufacturing
Electricity, Gas and Water Supply
Construction
Wholesale Trade
Retail Trade
Accommodation, Cafes and Restaurants
Transport and Storage
Communication Services

Finance and Insurance
Property and Business Services
Government Administration and Defence
Education
Health and Community Services
Cultural and Recreational Services
Personal and Other Services

For further information: Australian and New Zealand Standard Industrial Classification (ANZSIC) (cat. no. 1292.0) and associated products currently under development, including an article to be published soon in Australian Economic Indicators.

Commodity Classifications

ASCC

Australian Standard Commodity Classification

The Australian Standard Commodity Classification is used to classify commodities (i.e. goods and services) produced by industries. The ASCC, as developed to date, covers only transportable goods produced by the agriculture, mining and manufacturing industries.

The ASCC is aimed at improving:

- comparability between production, import, and export statistics;
- links between commodities and industries; and
- comparability between Australian and international commodity classifications.

The ultimate purpose of the ASCC is to facilitate the use of commodity statistics by governments and private organisations in, for example, the analysis of market shares; the relationship between employment, industry structure and tariff provisions; studies of import competition and replacement; and the conduct of trade and tariff negotiations.

By formally presenting production commodity items in a complete classification, and by showing the links to the underlying international standard classifications and the Australian Standard Industrial Classification (ASIC), the 1989-90 ASCC provides users and suppliers of ABS commodity data with a reference to the definitional basis of the commodities concerned.

The next edition of the ASCC, due for release in 1994, will cover all goods and services and provide links to ANZSIC. Negotiations with the New Zealand Department of Statistics may result in the production of a classification of all goods and services for both countries.

For further information: Australian Standard Commodity Classification (Revised) - Transportable Goods (cat. no. 1254.0) 1989-90.

HS

Harmonised Commodity Description and Coding System

On 1 January 1988, Australia adopted a new international classification system, the Harmonised Commodity Description and Coding System (HCDCS) for describing goods involved in international trade. The HCDCS, or Harmonised System (HS) for short, forms the basis for administering Australia's imports and exports and for the collection and presentation of foreign trade statistics.

All import and export transactions are reported to the Australian Customs Service (ACS) according to the following two classifications, which are extensions of the HS:

- import statistics are collected according to the Combined Australian Customs Tariff and Statistical Nomenclature which replaced the old Customs Tariff and the Australian Import Commodity Classification (AICC); and
- export statistics are collected according to the Australian Harmonised Export Commodity Classification (AHECC), which replaced the Australian Export Commodity Classification (AECC).

The HS has been developed to:

- provide international uniformity in classifying and coding goods;
- update the previously used Customs Cooperation Council Nomenclature (CCCN) to reflect technological developments and changes in the pattern of internationally traded goods; and
- simplify the collection, analysis and comparison of foreign trade statistics.

As a signatory to the Harmonised System Convention, Australia is obliged to collect and publish trade statistics classified by the HS, with the exception of confidential data. There is provision to extend the HS to meet the specific needs of local data users where they require finer level data.

For further information: Australian Harmonised Export Commodity Classification (AHECC) (cat. no. 1233.0), and Australian Harmonised Export Commodity Classification Microfiche (cat. no. 1235.0).

SITC

Standard International Trade Classification

Related to the HS is the Standard International Trade Classification (SITC), which was developed by the United Nations Statistical Office, primarily for economic analysis purposes. As such, it groups commodities to provide aggregates for classes of goods such as foods, raw materials, chemicals, machinery, etc. The hierarchy of the HS, on the other hand, is oriented more towards the requirements of customs administration activity.

The third revision of the SITC, known as SITC (Rev 3), was developed to keep the SITC in step with the HS, and was introduced with the HS on 1 January 1988. SITC (Rev 3) is used by the ABS for the dissemination of broad level import and export statistics. Categories in the SITC (Rev 3) are composed of one or more whole HS items, thereby permitting the direct reclassification of data collected according to the HS.

The SITC is also used in structuring categories of domestically produced goods as detailed in the Australian Standard Commodity Classification (ASCC).

For further information: Australian Harmonised Export Commodity Classification (AHECC) (cat. no. 1233.0), and Australian Harmonised Export Commodity Classification Microfiche (cat. no. 1235.0).

ATFCC

Australian Transport Freight Commodity Classification

The Australian Transport Freight Commodity Classification (ATFCC) and the Australian Pack Classification (APC) (described below) are related classifications and are often used in conjunction with each other. Both classifications were jointly developed by the Department of Transport and the Australian Bureau of Statistics in consultation with other interested bodies.

The Australian Transport Freight Commodity Classification is a commodity classification which provides a systematic arrangement of goods which are judged to be important in terms of their impact on Australia's transport network which includes transportation by sea, rail, road, air and pipeline. It has been devised to facilitate standardised classification of goods carried by these modes of transport to and from Australia and within Australia.

Because of the importance of the Standard International Trade Classification (SITC) in relation to the recording of the movement of goods via sea and air (both by overseas and coastal traffic), both the ASCC and the ATFCC are based fundamentally on that classification. Whereas the ASCC is structured broadly according to the 3-digit level of the SITC (Rev 3), the ATFCC is structured broadly according to the 2-digit level of the SITC. At this broad level of aggregation, it would be possible to compare commodities produced, imported and exported, with the movement of these commodities by various transport modes.

This classification may be used in conjunction with other classifications (such as origin, destination and routes of consignment, pack type of cargo defined for example by the Australian Pack Classification, freight handling methods, freight and wharfage charges) and has been designed with these uses in mind.

The classification is designed to facilitate the use of commodity data by organisations involved in transportation planning and in the design, control and monitoring of the operations of transport facilities.

APC

Australian Pack Classification

The Australian Pack Classification (APC) is used to classify units of freight transported by any transport mode, or moved through any port, depot or freight terminal.

The APC categorises freight in terms of its most immediately discernible units (e.g. freight in bulk, containers, etc), insofar as they have implications for handling, transportation, and administration. This classification is therefore aimed towards the operations side of the transport industry, where the provision of transport and handling equipment and the levying of freight charges is not related to individual commodities, but on a unit load basis.

For further information: Australian Transport Freight Commodity Classification (ATFCC) and Australian Pack Classification (APC) (cat. no. 1210.0). Australian Transport Freight Commodity Classification (ATFCC) on floppy disk (cat. no. 1256.0).

Institutional Classifications

SISCA

Standard Institutional Sector Classification of Australia

The Standard Institutional Sector Classification of Australia (SISCA) is used to classify institutional units, i.e. enterprises and households, by broad economic sector in national accounts and related statistics.

The main purpose of the classification in national accounts statistics is to classify transactors of the national income and outlay account and the national capital account into sectors according to

differences in their financial role and behaviour. This is done to facilitate the provision and analysis of sectoral statistics on the sources and uses of disposable incomes and capital funds.

The classification is also used in other statistical series for such purposes as:

- classifying enterprises to the public and private sectors of the economy;
- determining the scope of Australian Government Finance Statistics (GFS);
- classifying public sector enterprises in Government Finance Statistics (GFS) to relevant sectors and subsectors;
- determining the sector boundaries of the capital expenditure collections; and
- classifying units by sector in the Australian financial accounts.

The classification is based primarily on the institutional sectors recommended by the UN in "A System of National Accounts".

The Sectors and Subsectors of the SISCO are:

Corporate Trading Enterprises

Private Corporate Trading
Enterprises
Public Trading Enterprises

Commodity Marketing
Authorities
Other Public Trading
Enterprises

Financial Enterprises

Private Financial Enterprises
Public Financial Enterprises

Reserve Bank
Other Public Financial
Enterprises

General Government Enterprises

Households and Other Private Enterprises

Households
Private Unincorp. Trading
Enterprises
Private Non-profit Institutions
Serving Households

Non-Resident Enterprises in Australia

The SISCO is currently being reviewed in the light of changes made to the economic units model used by the ABS, changes to the SNA, and user requirements.

For further information: Standard Institutional Sector Classification of Australia (SISCO) (cat. no. 1218.0) (1987) ; and Classification Manual for Government Finance Statistics, Australia (cat. no. 1217.0).

Government Finance Classifications

CMGFS

Classifications Manual for Government Finance Statistics, Australia

The classifications contained in the Classifications Manual for Government Finance Statistics, Australia (CMGFS) are applied to enterprise units of the non-financial public sector and their transactions. The non-financial public sector consists of general government enterprises such as Commonwealth and State government departments as well as public trading enterprises such as TELECOM and electricity operations of State and local governments.

The statistical unit used in government finance statistics is the enterprise. Each government department, statutory authority and local government authority is generally treated as a separate enterprise. In some cases, however (notably local government authorities), these units have been 'split' to form more than one unit where the original unit engages in a mixture of trading and general government activities.

The CMGFS contains two types of classifications - 'transactor unit' or enterprise level classifications and 'transaction' level classifications.

The main classifications applied to enterprise units are:

- institutional sector (i.e. general government, public trading enterprise);
- level of government (i.e. Commonwealth, State, Local); and
- administrative sector (i.e. budget, non-budget).

The principal classifications applied to transactions data are the Economic Transactions Framework (ETF), the Taxes, Fees and Fines Classification (TFFC) and the Government Purpose Classification (GPC). This brief overview will only outline these three major classifications:

- The ETF is modelled along standards promulgated by the International Monetary Fund. It is designed to group transactions of the non-financial public sector in a manner which facilitates the study of the macro-economic impact of government transactions in the economy. It also provides the basic building blocks to derive the aggregates to be incorporated into the Australian National Accounts.
- The TFFC is used to classify, in detail, all transactions which have been classified by the ETF as either taxes, fees or fines received. It therefore provides a supplementary dissection of these transactions according to the type of tax, fee or fine collected by governments.
- The GPC, which closely follows the United Nations' 'Classification of the Functions of Government' (COFOG), classifies selected government transactions in terms of the purposes for which they are made. In conjunction with the ETF, the GPC provides information on the socio-economic effects of government transactions. It is especially useful in establishing the trends in government outlays on particular purposes over time. The main transactions which are classified by the GPC are current and capital outlays of both general government and public trading enterprises, including grants and advances received by them.

Further information: Classification Manual for Government Finance Statistics, Australia (cat. no.

1217.0) (1989).

SOCIAL CLASSIFICATIONS

Occupation Classifications

ASCO

Australian Standard Classification of Occupations

The Australian Standard Classification of Occupations (ASCO) is a skill based classification of occupations developed in Australia as a national standard for the production and analysis of labour force statistics, human resources management, education planning, the listing of job applicants and vacancies, the provision of occupational information and for vocational guidance.

The purpose of ASCO is:

- to identify a set of occupations covering all jobs in the Australian economy;
- to define those occupations in terms of a number of selected attributes; and
- to group those occupations, on the basis of their similarity, into successively broader categories for purposes of statistical description and analysis.

The individual unit of classification is typically a job, which is defined as the set of tasks performed by a given worker in a given establishment. An occupation is then defined as a set of jobs with identical sets of tasks. In the real world, every job is a little different. In practice, an occupation is a collection of jobs sufficiently similar in their main tasks to be grouped together for classification purposes.

The structure of the ASCO is based on kind of work and defined in terms of two broad criteria - skill level and skill specialisation.

As a result of recent widespread change in the labour market such as multi-skilling and award restructuring, it has become necessary to revise the current structure of ASCO (First Edition). A joint project team comprising staff from the ABS and DEET, has been established to conduct a review of ASCO (First Edition) with the aim of providing a revised edition for use over the ten year period from 1996 to 2005.

For further information: A detailed explanation of all ASCO products is provided in the information paper ASCO - Australian Standard Classification of Occupations (cat. no. 1221.0).

Education Classifications

ABSCQ

Australian Bureau of Statistics Classification of Qualifications

The Australian Bureau of Statistics Classification of Qualifications (ABSCQ) was designed for use in the collection and presentation of data on qualifications held by the population. For the purposes of the ABSCQ, an 'educational qualification' is considered to be an award for attainment as a result of formal learning, from an accredited post-school institution.

Qualifications can be classified according to the following elements:

- level of attainment; and
- field of study.

Level of attainment is a function of the quality and quantity of learning necessary to obtain that qualification. Field of study refers to the subject matter taught in the course of study leading to the award of a particular qualification.

The ABSCQ was first used in the 1991 Census of Population and Housing, and is now being progressively introduced into other ABS collections.

For further information: Details about the ABSCQ, including related publications, can be found in Information Paper: Australian Bureau of Statistics Classification of Qualifications - ABSCQ (cat. no. 1263.0).

Health Classifications

ICD

International Classification of Diseases

The World Health Organization's International Classification of Diseases (ICD) is used by the ABS for the collection, compilation and publication of disease and injury statistics. The ICD is revised approximately every ten years. The ninth revision is currently in use, and was adopted from 1979. The tenth revision is expected to be available by 1 January 1995.

The ICD enables classification of diseases and injury at fine levels of detail. The ICD is used by the ABS principally in classifying causes of death. It is also applied to occupational health and safety data for occupational diseases and occupational injuries. Other ABS uses have included disease/injury coding for hospital morbidity collections and health surveys.

For mortality coding, the concept of the underlying cause of death is used, which the World Health Organization (WHO) has defined as the disease or injury which initiated the train of events leading directly to death. Accidental and violent deaths are classified according to the external cause, that is, to the circumstances of the accident or violence which produced the fatal injury rather than to the nature of the injury.

For further information: International Classification of Diseases 1975 Revision Volume 1, World Health Organization; International Classification of Diseases 1975 Revision Volume 2 Alphabetical Index, World Health Organization

These classifications can be obtained from the Australian Government Publishing Service.

Crime Classifications

ANCO

Australian National Classification of Offences

The Australian National Classification of Offences (ANCO) has been developed by the ABS for use in the preparation of statistics by crime and justice agencies in all Australian States and Territories.

The purpose of the ANCO is to provide a framework for classifying offences for statistical purposes, which is able to be applied at various levels of detail by police, courts, legal aid, correction and other agencies involved in crime and justice.

Offences are defined in legislation and in documents of the relevant agency and therefore no attempt is made in the classification to define the elements or circumstance which constitute an offence. In all cases the offence as described in source documents is the offence to be classified.

The main factors taken into consideration in developing the classification were:

- the need to provide a classification usable in different areas of crime and justice;
- differing legislation in individual States and Territories and Federal legislation;
- the homogeneity of groupings in terms of the nature of constituent offences;
- the need to identify separately offences of particular interest; and
- the incidence of particular offences.

For further information: Australian National Classification of Offences (ANCO) (cat. no. 1234.0).

Core Social and Labour Variables

A number of standard classifications for core variables in social and labour statistics are currently being developed and will be presented in the following publications:

- Standards for Statistics on Age and Sex (cat. no. 1285.0);
- Standards for Statistics on Family Variables (cat. no. 1286.0);
- Standards for Statistics on Income (cat. no. 1287.0);
- Standards for Statistics on Core Labour Force Variables (cat. no. 1288.0).

OTHER CLASSIFICATIONS

Research Classifications

ASRC

Australian Standard Research Classification

The ASRC is the collective name given to a set of three related classifications developed for use in the measurement and analysis of research and experimental development (R&D) undertaken in Australia, both in the public and private sectors. It aims to facilitate the comparison of R&D data between sectors of the Australian economy (e.g. general government, private non-profit organisations, business enterprises and educational institutions). The three classifications are:

- Type of Activity Classification (TOA), which allows R&D activity to be classified according to the type of research effort (pure basic research, strategic basic research, applied research or experimental development).
- Field of Research Classification (FOR), which allows R&D activity to be classified according to the field of research undertaken. The classification is based primarily on recognised academic disciplines and evolving areas of study.
- Socio-Economic Objective Classification (SEO), which allows R&D activity to be classified

according to the purpose of the R&D as perceived by the data provider (researcher). It consists of discrete economic, social, technological or scientific domains for identifying the principal purpose of the R&D. The attributes applied to the design of the SEO classification consists of a combination of processes, products, health, education and other social and environmental aspects of particular interest.

To support international comparisons, the definition, scope and classification of R&D activities have been largely devised in accordance with the Organisation for Economic Co-operation and Development (OECD) Proposed Standard Practice for Surveys of Research and Experimental Development, "Frascati Manual", fifth revision, 1992.

For further Information: Australian Standard Research Classification (ASRC) (cat. no. 1297.0).

Other Principal Classifications

An article of this nature cannot cover the full range of classifications used by the ABS. As mentioned in the introduction, only major ABS classifications have been described. Some other principal classifications which may be of interest to users of ABS statistics are presented in the table below.

TABLE 1. OTHER PRINCIPAL CLASSIFICATIONS USED BY THE ABS

OTHER PRINCIPAL CLASSIFICATIONS USED BY THE ABS	
Classification of Institutional Units Type of Legal Organisation (TOLO) Level of Government Administrative Sector Source Destination Classification	Status in Employment Hours Worked Per Week Method of Travel to Work Labour Costs Full-time/Part-time Status Duration of Unemployment
Classification of Commodities Classification of Commodities by Broad Economic Categories (BEC) Input-Output Commodity Classification (IOCC) Materials Used Classification Retail Trade Commodity Classification Agricultural Commodity Classification Household Expenditure Survey Commodity Code List (HESCL)	Classification of Industrial Accidents Type of Accident Nature of Injury Bodily Location Agency of Accident
Classification of Buildings New Functional Classification of Buildings Dwelling Structure Type	Classification of Industrial Disputes Cause of Dispute Duration of Dispute Method of Settlement
Classification of Financial Assets and Liabilities Type of Assets and Liabilities Type of Deposits and Advances	Education Classifications Type of Student Type of Institution
Classification of Travel Type of Visitor Type of Consumer Purpose of Visit	Welfare Classifications Australian Standard Welfare Activities Classification (ASWAC)
Classification of Road Traffic Accidents Nature of Accidents Type of Road User Involved	Classification of Families, Households and other Social Groups Household Type Family Type Relationship in Household Marital Status
Labour Force Classifications	Income Classifications Income

This page last updated 14 December 2009

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence